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TRANSACTIONS, PROCEEDINGS, AND ABSTRACTS.

1912.

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Enzymes. See also:—
 Amylase.
 Analase.
 Anti-emulsin.
 Antithrombin.
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 Cellase.
 Cellulase.
 Cholesterase.

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Erepsin.
Emulsin.
Gelatinase.
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Lactase.
Levanase.
Linase.
Lipase.
Maltase.
Nuclease.
Nucleosidase.
Oxydase.
Pancreatin.
Pepsin.
Peroxydase.
Phenolase.
Phosphatase.
Prothrombin.
Prunase.
Reductase.
Rennin.
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- 3:4-*d*ihydroxy-**, and its hydrochloride (ROSENMUND, MANNICH, and JACOBSON), A., i, 967.
- Phenylethylbarbituric acid**, compounds of, with quinine and with hydroquinine (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 798.
- 5-Phenyl-5-ethylbarbituric acid** and its salts (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 1024.
- Phenylethylbromoarsine** (WINMILL), T., 720.
- α -Phenyl- β -ethylbutanedione**. See Ethylbenzoylacetone.
- α -Phenyl- α -ethylbutyramide** (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 974.
- α -Phenyl- α -ethylbutyronitrile** (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 974.
- α -Phenyl- α -ethylbutyrylcarbamide** (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 974.
- Phenylethylchloroarsine** (WINMILL), T., 720.
- 4-Phenyl-4-ethylidihydrouracil** (POSNER and STIRNUS), A., i, 456.
- β -Phenylethylidimethylamine** and its salts (DECKER and BECKER), A., i, 844.
- Phenylethylidimethylthiocarbamide** (v. BRAUN and DEUTSCH), A., i, 693.
- Phenylethyl ethyl ether** (HOLMBERG), A., i, 448.
- α -Phenyl- α -ethylglycollic acid**. See α -Phenylbutyric acid, α -hydroxy-.
- α -Phenylethylidenetriazoacetohydrazide** (CURTIUS and BOCKMÜHL), A., i, 426.
- Phenyl ethyl ketone**, desaurin from (KELBER and SCHWARZ), A., i, 207.
- Phenylethylmalonic acid** and its chloride (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 1025.
- ethyl ester** (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 1024.
- β -Phenylethylmethylamine** and its salts (DECKER and BECKER), A., i, 845.
- 1- α -Phenylethyl-5-methyltriazole**, 3-hydroxy- (RUPE and OESTREICHER), A., i, 220.
- β -Phenyl- α -ethylpropionic acid**, β -amino- (POSNER and STIRNUS), A., i, 456.
- Phenylethyl-*n*-propylallylarsonium bromide** and *d*- α -bromocamphor- π -sulphonate (WINMILL), T., 722; P., 93.
- α -Phenylethylisopropylamine** and its salts and derivatives (DE LEEUW), A., i, 24.
- Phenylethyl-*n*-propylarsine** (WINMILL), T., 720.
- 1-Phenyl-3-ethyl-5-pyrazolone-4-phenylhydrazone** (WAHL and DOLL), A., i, 536.
- 3- β -Phenylethylrhodanine** (HOLMBERG), A., i, 151.
- α -Phenylethylsemicarbazide** and its derivatives (RUPE and OESTREICHER), A., i, 220.
- Phenylethylsilicanediol** (ROBISON and KIPPING), T., 2158; P., 245.
- Phenylethylsulphone**, *p*-iodo-, *p*-iodoso-, and *p*-iodoxy-, and their derivatives (WILLGERODT and KLINGER), A., i, 256.
- β -Phenylethylidithiourethane** (v. BRAUN), A., i, 551.
- 1- α -Phenylethyltriazole**, 3-hydroxy- (RUPE and OESTREICHER), A., i, 220.
- β -Phenylethyltrimethylammonium salts** (DECKER and BECKER), A., i, 844.
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- α -Phenyl- β -ethylvaleric acid** (*phenyldiethylcarbonylacetetic acid*) (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 974.
- 9-Phenylfluorone**, 2:3:7-*tri*hydroxy-, ethers of (KEHRMANN and GÜNTHER), A., i, 1012.
- β -Phenylglutaconic acid**, derivatives of (BLAND and THORPE), T., 868; P., 49.
- Phenylglyceramide** (FISCHER), A., i, 187.
- Phenylglycerylglycine** (FISCHER), A., i, 187.

- Phenylglycine-2-carboxylic acid**, 3-, 4- and 5-bromo- (FRIEDLÄNDER, BRUCKNER, and DEUTSCH), A., i, 318.
- Phenylglycollonitrile**, condensation of, with aromatic aldehydes in presence of thionyl chloride (MINOVICI and ZENOVICI), A., i, 699.
- Phenylglyoxalhydrazone** (WOLFF), A., i, 1028.
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- Phenylglyoximic acid**, 4-nitro-2-hydroxy (BORSCHKE and OPPENHEIMER), A., i, 652.
- Phenylglyoxylic acid**, *o*-nitrophenylhydrazone and its silver and potassium salts (GASTALDI), A., i, 700.
- Phenylglyoxylic acid**, *o*-hydroxy-, derivatives of (FRIES and PFAFFENDORF), A., i, 205.
- Phenylglyoxylo-*p*-dimethylaminoanilide**, *o*-hydroxy-, and its benzoyl derivative (FRIES and PFAFFENDORF), A., i, 205.
- Phenylheptadecylcarbinol** (RYAN and NOLAN), A., i, 750.
- Phenyl heptadecyl ketone** and its phenylhydrazone (RYAN and NOLAN) A., i, 750.
- η -Phenylheptaldehyde** and its *p*-nitrophenylhydrazone (v. BRAUN and KRUBER), A., i, 267.
- α -Phenylheptane**, η -nitro- (v. BRAUN and KRUBER), A., i, 267.
- δ -Phenyl- $\Delta\gamma$ -heptene** and its nitrosochloride (MURAT and AMOUROUX), A., i, 528.
- η -Phenylheptyl nitrite** (v. BRAUN and KRUBER), A., i, 267.
- Phenyl hexahydrostyryl ketone** (FRÉZOULS), A., i, 629.
- ζ -Phenylhexaldehyde** (v. BRAUN and KRUBER), A., i, 267.
- α -Phenylhexane**, ϵ -bromo- (v. BRAUN, DEUTSCH, and SCHMATLOCH), A., i, 434.
- ζ -nitro-** (v. BRAUN and KRUBER), A., i, 266.
- Phenylcyclohexane**, preparation of (SABATIER and MURAT), A., i, 547.
- ϵ -Phenylhexoic acid**, α -amino-, and α -bromo-, and derivatives (v. BRAUN and KRUBER), A., i, 265.
- ζ -Phenylhexyl nitrite** (v. BRAUN and KRUBER), A., i, 266.
- Phenylhexylene** (v. BRAUN, DEUTSCH, and SCHMATLOCH), A., i, 434.
- α -Phenyl- α -cyclohexylethane** (SABATIER and MURAT), A., i, 617.
- Phenylhexyl methyl ether** (v. BRAUN and DEUTSCH), A., i, 687.
- 4-Phenylhydantoin**, 5-thio- (JOHNSON and CHERNOFF), A., i, 810.
- Phenylhydrazine 1:3:5-trinitrobenzenate** (OSTROMISLENSKY), A., i, 23.
- Phenylhydrazine-*o*-sulphonic acid**, *p*-nitro-, and its sodium salt (GREEN and ROWE), T., 2448.
- ϵ -Phenylhydrazino- $\beta\delta$ -*d*-hydroxy- $\alpha\gamma$ -diphenylpentane**, ϵ -imino- and derivatives (SPÄTH), A., i, 979.
- Phenylhydrazonoanisoylactic acid**, and *p*-nitro-, and their methyl esters (WAHL and SILBERZWEIG), A., i, 214.
- α -Phenylhydrazonoazo-*o*-methoxybenzoylactic acid**, and *p*-nitro-, methyl esters (WAHL and SILBERZWEIG), A., i, 213.
- Phenylhydrazono-*m*-methoxybenzoyl acetic acid** and *p*-nitro-, methyl esters (WAHL and SILBERZWEIG), A., i, 214.
- 4-Phenylhydrazono-1-*p*-nitrophenyl-3-*o*-, and *p*-methoxyphenyl-5-pyrazolones** (WAHL and SILBERZWEIG), A., i, 214.
- 4-Phenylhydrazono-1-phenyl-3-*o*-*m*-, and *p*-methoxyphenyl-5-pyrazolones**, and 4-*p*-nitro- (WAHL and SILBERZWEIG), A., i, 214.
- Phenylhydrazopyrazolone** (WAHL and DOLL), A., i, 626.
- 3-Phenyl-4-*mp*- and -*mp*-*d*-hydroxybenzylideneisooxazolones** (MEYER), A., i, 1019.
- β -Phenylhydroxylamine**, β -cyano-, and its iminochloride hydrochloride (WIELAND, ROSEEU, and GAMBARJAM), A., i, 907.
- Phenyl 2-hydroxynaphthyl ketone**, 2:4-*d*ihydroxy-, and 2:3:4-*tri*hydroxy- (DUTTA and WATSON), T., 1242; P., 107.
- 5-Phenyl-2-*p*-hydroxyphenyloxazole** (LISTER and ROBINSON), T., 1313.
- 3-Phenyl-2-*o*-hydroxystyryl-4-dihydroquinazolone** (BOGERT and BEAL), A., i, 394.
- Phenyl-2-hydroxystyryl ketone**, 2:4-*d*ihydroxy- (DUTTA and WATSON), T., 1242.
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- Phenyliminodiphenylacetic acid**, ethyl and methyl esters (STOLLÉ and SCHMIDT), A., i, 981.
- 1-Phenyl-1-indenol**, 2:3-*d*ibromo-, and its acetyl derivative (SIMONIS and KIRSCHVEN), A., i, 271.
- 1-Phenyl-4:5-indenopyrazole-3-carboxylic acid** and its ethyl ester and silver salt (RUHEMANN), T., 1736; P., 224.
- 6-Phenyl-2:3-indeno-4-pyrone** and its platinichloride (RUHEMANN), T., 1738; P., 225.

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- 2-Phenylindolone** and its derivatives (KALB and BAYER), A., i, 726.
- 2-Phenylindone**, 4-nitro- (*phenyl-o-nitro-indone*), constitution of, and of its ozonide (THIELE and RUGGLI), A., i, 867.
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- Phenylindones**, nitro-, photochemical reactions of (BAKUNIN), A., i, 344, 356.
- 2-Phenylindoxyl** and its compound with 2-phenylindolone (KALB and BAYER), A., i, 727.
- 2-Phenylindoxyl**, 6-nitro- (PFEIFFER, FORNET, KRAMER, MATZKE, and SPIRO), A., i, 619.
- 2-Phenylindyl-3-benzoquinone** (MÖHLAU and REDLICH), A., i, 129.
- 2-Phenylisatogen**, 6-nitro (PFEIFFER, FORNET, KRAMER, MATZKE, and SPIRO), A., i, 619.
- 2-Phenylisatogen-6-carboxylic acid**, ethyl ester (PFEIFFER, FORNET, KRAMER, MATZKE, and SPIRO), A., i, 619.
- β -Phenyl-lactic acid**, α -chloro-, ammonium and aniline salts of (RASSOW and BURMEISTER), A., i, 32.
- Phenylmalonic acid**, 2-bromo-3-iodo-4:6-dinitro-, ethyl ester (JACKSON and BIGELOW), A., i, 102.
- Phenylmalonyl chloride** (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 1025.
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- Phenylmenthylmethylmethane** and its benzoate (BÖDTKER), A., i, 278.
- 1-Phenyl-4-*p*-methoxybenzyl-3-methyl-2-thiohydantoin** (JOHNSON and NICOLET), A., i, 585.
- α -Phenyl-*p*-methoxycinnamic acid**, *p*-nitro- (HEWITT, LEWCOCK, and POPE), T., 608.
- Phenyl-3-methoxy-4:5-methylenedioxybenzylcarbamide** (RÜGHEIMER and RITTER), A., i, 447.
- Phenyl-3-methoxy-4:5-methylenedioxybenzylthiocarbamide** (RÜGHEIMER and RITTER), A., i, 447.
- 2-Phenyl-4-*p*-methoxyphenyl-7-methyl-5:6:7:8-tetrahydroquinoline** and its salts (CRUIKSHANKS and SCHWYZER), A., i, 785.
- 1-Phenyl-3-*o*-methoxyphenyl-5-pyrazolone**, 1-*p*-nitro- (WAHL and SILBERZWEIG), A., i, 213.
- 1-Phenyl-3-*m*-methoxyphenyl-5-pyrazolone** and 4-oximino- (WAHL and SILBERZWEIG), A., i, 214.
- 1-Phenyl-3-*p*-methoxyphenyl-5-pyrazolone**, 1-*p*-nitro-, and 4-oximino- (WAHL and SILBERZWEIG), A., i, 214.
- Phenyl- α -methoxystyryl ketone**, oxime of (ABELL), T., 994.
- Phenylmethylallylarsine** (WINMILL), T., 724.
- 5-Phenyl-5-methylbarbituric acid** (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 1025.
- 1-Phenyl-2-methylbenzimidazole** (WOLFF), A., i, 1028.
- Phenylmethylbromoarsine** (WINMILL), T., 723.
- α -Phenyl- β -methylbutane- α -dione** (*methylbenzoylacetone*), and its copper salt (DIECKMANN), A., i, 868.
- β -Phenyl- γ -methylbutylene β - γ -glycol** (LEPIN), A., i, 958.
- γ -Phenyl- γ -methyl- $\Delta\beta$ -butylene α -oxide** (LEPIN), A., i, 958.
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- Phenyl-3-methyl-2-carboxyphenylthiolacetic acid**, 5-chloro- (KALLE & Co.), A., i, 209.
- 2-Phenyl-5-methyl-1:2-dihdropyridone**, 3-hydroxy- (BLAND and THORPE), T., 868.
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- 3-Phenyl-2-methyl-4-dihydroquinazolinone**, 3-*p*-cyano- (BOGERT and BEAL), A., i, 393.
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- 4-Phenyl-5-methyldihydro-3-thionracil** (POSNER and STIRNUS), A., i, 456.
- 4-Phenyl-4- and 5-methyldihydrouracils** (POSNER and STIRNUS), A., i, 456.
- 3-Phenyl-1-methyldioxindole methyl ether** (KOHN and OSTERSETZER), A., i, 51.
- 5-Phenyl-7-*mp*-methylenedioxyphenyl-2:3-dihydro-4-pyridene**, salts of (STRIEGLER), A., i, 782.
- 1-Phenyl-3-*mp*-methylenedioxyphenyl-7-methyloctahydroindenes**, 1:9-dihydroxy- (STRIEGLER), A., i, 784.
- 2-Phenyl-4-*mp*-methylenedioxyphenyl-7-methyl-5:6:7:8-tetrahydroquinoline** and its picrate (STRIEGLER), A., i, 784.
- Phenylmethylethylammonium** *d*-tartrate, hydroxy- (MEISENHEIMER), A., i, 25.

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2-Phenyl-5-methyl-1:3:4-oxadiazole and its derivatives (STOLLÉ, MAMPEL, HOLZAPFEL, and LEVERKUS), A., i, 226.

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α -Phenyl- β -methylpentane (BJELOUSS), A., i, 230.

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5-Phenyl-3-methylpyrazoline and its hydrochloride (KIJNER), A., i, 758.

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2-Phenyl-1-methylquinolinium iodide, 4-chloro- (KAUFMANN and VONDERWAHL), A., i, 503.

2-Phenyl-1-methylquinolylene-4(2')-quinaldine and its ethiodide and iodide (KAUFMANN and VONDERWAHL), A., i, 503.

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δ -Phenyl- α -methylvaleric acid (v. BRAUN, DEUTSCH, and SCHMATLOCH), A., i, 434.

α -Phenylnaphthylamine, *m*- and *p*-chloro- (KNOLL & CO.), A., i, 345.

β -Phenylnaphthylamine, and *o*-, *m*-, and *p*-chloro- (KNOLL & CO.), A., i, 345.

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5-Phenylloxazole-2-*p*-benzeneazodietylaniline (LISTER and ROBINSON), T., 1313.

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3-Phenylisooxazolone, 4:4-dibromo-, and its derivatives (MEYER), A., i, 582.

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α -Phenylpentane, $\alpha\delta$ -diamino- (δ -phenyl- α -methyltetramethylenediamine), and its derivatives (FINZI), A., i, 1022.

δ -bromo-, and δ -cyano- (v. BRAUN, DEUTSCH, and SCHMATLOCH), A., i, 434.

ϵ -nitro-, and its derivatives (v. BRAUN and KRUBER), A., i, 266.

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- Phenylphenazonium** salts, *dichloro-* (BALLS, HEWITT, and NEWMAN), T., 1849.
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- Phenylphenylbutylthiocarbamide** (V. BRAUN and DEUTSCH), A., i, 694.
- 1-Phenyl 4 α phenylethylidene-3-methyl-5-pyrazone** (HEIDUSCHKA and ROTHACKER), A., i, 52.
- Phenyl β -phenylethyl ketone** (DUTTA and WATSON) P., 106.
- Phenylphenylpropylthiocarbamide** (V. BRAUN and DEUTSCH), A., i, 694.
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- Phenyl α -piperidylbenzyl ketone** and its methiodide (RABE and RIEPER), A., i, 718.
- δ -Phenyl- β -piperidylpropiophenone** and its salts (GEORGI and SCHWYZER), A., i, 787.
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- β -Phenyl- β -3-piperonylidene-cyclopentan-2-onylpropiophenones** (GEORGI and VOLLAND), A., i, 781.
- 3-Phenyl-1-piperonyl-5-pyrazolone** and 4-oximino-, and their silver salts (CURTIUS and SCHMITTMANN), A., i, 509.
- γ -Phenylpropaldehyde** and α -nitro-, derivatives of (V. BRAUN and KRUBER), A., i, 266.
- α -Phenylpropane**, *di- γ -bromo- γ -nitro-*, and γ -nitro- (V. BRAUN and KRUBER), A., i, 266.
- α -Phenylcyclopropane- $\alpha\beta$ -dicarboxylic acid**, α -cyano-, ethyl ester (SCHEIBER), A., i, 561.
- α -Phenylpropionic acid**, amino-, *dl-*, *d-*, and *l*-formyl derivatives (McKENZIE and CLOUGH), T., 394.
- d-* and *l*- α -amino- (McKENZIE and CLOUGH), T., 396.
- α -hydroxy-, and its salts (SMITH), A., i, 113.
- β -Phenylpropionic acid**, glycyl ester (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 974.
- β -Phenylpropionic acid**, $\alpha\beta$ -diamino-, α -benzoyl derivative (POSNER and STIRNUS), A., i, 457.
- 3-amino-*m-*, and *p*-hydroxy-, *m*- β -diamino-, and *o-*, *m-*, and *p*-nitro- β -amino- (POSNER), A., i, 455.
- ω -(β -Phenylpropionylamino)acetophenone** (LISTER and ROBINSON), T., 1303.
- γ -Phenylpropyl chloride**, *p*-hydroxy-, and *p*-nitro- (V. BRAUN and DEUTSCH), A., i, 845.
- mercaptan (V. BRAUN), A., i, 552.
- nitrite (V. BRAUN and KRUBER), A., i, 266.
- α -Phenylpropyl alcohol**, β -oximino- (RABE and HUNNIUS), A., i, 718.
- γ -Phenylpropyl alcohol**, *p*-hydroxy- (*homotyrosol*), and its dibenzoyl derivative (V. BRAUN and DEUTSCH), A., i, 846.
- Phenylisopropylamine**, *p*-hydroxy- and its hydriodide (ROSENMUND, MANNICH, and JACOBSON), A., i, 443.
- 3:4-*d*-hydroxy- and its salts (ROSENMUND, MANNICH, and JACOBSON), A., i, 967.
- 5-Phenyl-5-propylbarbituric acid** (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 1025.
- 3-Phenyl-4-*p*-isopropylbenzylidene-*iso*-oxazolone** (MEYER), A., i, 1019.
- Phenylpropylbutylene** (AMOUROUX and MURAT), A., i, 415.
- γ -Phenylpropyldimethylamine**, *p*-amino-, *o-*, and *p*-hydroxy-, and *p*-nitro-, and their salts and derivatives (V. BRAUN and DEUTSCH), A., i, 845.
- ω -Phenyl-*n*-propylmalonic acid** and its methyl ester (BORSCHKE), A., i, 264.
- δ -Phenylpropylmalonic acid** and its ethyl ester (V. BRAUN and KRUBER), A., i, 265.
- Phenylpropylthiocarbamide** (V. BRAUN and DEUTSCH), A., i, 694.
- Phenylpropylthiocarbimide** (V. BRAUN and DEUTSCH), A., i, 693.
- γ -Phenylpropyldithiourethane** (V. BRAUN), A., i, 552.
- α -Phenyl- α -propylvaleramide** (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 974.
- α -Phenyl- α -propylvaleronitrile** (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 974.
- 4-Phenylpyridazine**, *p*-hydroxy- and its 5-carboxylic acid (STOERMER and GAUS), A., i, 1027.
- Phenylpyridazonanthrone** and 5-amino- and *p*-bromo- (ÜLLMANN and VAN DER SCHALK), A., i, 387.
- Phenylpyridazonanthrone**, 4-amino-, and 4-chloro- (ÜLLMANN and MINAJEFF), A., i, 388.
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- Thionyl chloride**. See under Sulphur.
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- Thiophen**, preparation of (STEINKOPF), A., i, 292.
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- Thiophenic acid**, action of hydrogen peroxide on (LANFRY), A., i, 717.
- Thiophenols** (BRAND and WIRSING), A., i, 666.
- 3-Thiophen-2:4:5-tricarboxylic acid**, 3-hydroxy-, 2-ethyl dihydrogen ester, and its sodium salt (HINSBERG), A., i, 894.
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- Thymus-nucleic acid**, structure and hydrolysis of (LEVENE and JACOBS), A., i, 926.
- α -Thymylcarbonatobenzoic acid** (EINHORN, ROTHLAUF, and SEUFFERT), A., i, 32.
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- Tissues**. See also Animal tissues.
- Titanates**. See under Titanium.
- Titanium compounds**, behaviour of phenols, naphthols, and phenolcarboxylic acids with (HAUSER and LEWITE), A., i, 847.
- Titanium potassium hydrogen di-imide** (RUFF and TREIDEL), A., ii, 561.
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- Titanium dioxide**, heat of formation of (MIXTER), A., ii, 133.
- Titanates**, thermal analysis of mixtures of silicates and (SMOLENSKY), A., ii, 160.
- Titanium**, estimation of, in presence of iron (THORNTON), A., ii, 1000.
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- m-Tolualdehyde*, 2-iodo- (MAYER), A., i, 478.
- p-Tolualdehyde-p-methylbenzylhydrazone* and its salts (CURTIUS and SPRENGER), A., i, 139.
- p-Tolualdehyde- α -naphthylhydrazone* (PADOA and BOVINI), A., i, 224.
- Toluene**, ultra-violet absorption spectrum of (CREMER), A., ii, 405.
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- Toluene**, 6-bromo-2-nitro- (FRIEDLÄNDER, BRUCKNER, and DEUTSCH), A., i, 318.
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- Toluene**, 6-chloro-3-hydroxy-, and 4-chloro-2:3:5-trihydroxy- (HENRICH, TAUBERT, and BIRKNER), A., i, 185.
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ω-2-dinitro-, preparation of (SOCIÉTÉ CHIMIQUE DES USINES DU RHÔNE), A., i, 756.
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4-*p*-Tolueneazo-1-benzyl-3-methyl-5-pyrazolone (CURTIUS and SCHNEIDERS), A., i, 138.
***m*-Tolueneazo-*β*-naphthol** (NORMAN), T., 1921.
 1-*o*- and -*p*-Tolueneazo-2-naphthyl-methyl ethers and their hydrochlorides (CHARRIER and FERRERI), A., i, 813.
o-, *m*-, and *p*-Tolueneazo-*β*-naphthylamines and their derivatives (NORMAN), T., 1918; P., 232.
o-Toluenebisazo-*β*-naphthol, *di*- and *tri*-thio- (HODGSON), T., 1699; P., 222.
o- and *p*-Toluenediazonium chlorides, compounds of, with antimony trichloride (MAY), T., 1038.
4-*p*-Toluenesulphonamino-*N*-phenylpyridazonanthrone (ULLMANN and MINAJEFF), A., i, 389.
Toluene-*m*-sulphonic acid, *ω*-dichloro-, and its chloride and sodium salt (BADISCHE ANILIN- & SODA-FABRIK), A., i, 176.
Toluene-*p*-sulphonic acid, bornyl and ethylpyridinium esters (FERNS and LAPWORTH), T., 276.
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ω-chloro-, and its sodium salt (BADISCHE ANILIN- & SODA-FABRIK), A., i, 176.
ω-2-dichloro-, ethyl ester (BADISCHE ANILIN- & SODA-FABRIK), A., i, 176.

(*Tolyl compounds, Me=1.*)

- Toluene-*p*-sulphonic acid**, 2-nitro-, 5-nitro-*o*-tolyl ester (REVERDIN), A., i, 436.
Toluene-*p*-sulphonylalanine (POPE and GIBSON), T., 945.
2-Toluene-*p*-sulphonyl-1:2:6-triamino-naphthalene (MORGAN and MICKLETHWAIT), T., 150.
Toluene-*p*-sulphonyl-*p*-anisidide, *o*-nitro-, and its derivatives (REVERDIN and DE LUC), A., i, 182.
Toluene-*p*-sulphonylisobutylamide (POPE and READ), T., 521.
4-Toluene-*p*-sulphonyldiphenyliodonium salts (WILLGERODT and PLOCKSTIES), A., i, 257.
Toluene-*p*-sulphonylmethylamino-*p*-benzene-2-azo-7-amino-*α*-naphthol-3-sulphonic acid, sodium salt (MORGAN and MICKLETHWAIT), T., 146.
2-Toluene-*p*-sulphonyl-2-methyl-1:2:6-triaminonaphthalene (MORGAN and MICKLETHWAIT), T., 152.
Toluene-*p*-sulphonylmethyl-*β*-naphthylamine (MORGAN and MICKLETHWAIT), T., 150.
2-Toluene-*p*-sulphonyl-2-methyl-1:2-naphthylenediamine (MORGAN and MICKLETHWAIT), T., 151.
Toluene-*p*-sulphonylmethyl-*m*- and -*p*-nitroanilines (MORGAN and MICKLETHWAIT), T., 144.
Toluene-*p*-sulphonylmethyl-1-nitro- and 1:6-dinitro-*β*-naphthylamine (MORGAN and MICKLETHWAIT), T., 150.
as-Toluene-*p*-sulphonylmethyl-*m*- and *p*-phenylenediamine and their derivatives (MORGAN and MICKLETHWAIT), T., 145.
2-Toluene-*p*-sulphonyl-1:2-naphthylenediamine and its -6-sulphonic acid (MORGAN and MICKLETHWAIT), T., 149.
**Toluene-*p*-sulphonyl (REVERDIN), A., i, 963.
Toluene-*p*-sulphonyl-1:6-dinitro-*β*-naphthylamine (MORGAN and MICKLETHWAIT), T., 148.
***p*-Toluenesulphonylpropylisobutylamide**, preparation of (POPE and READ), T., 521.
o-Toluic acid, ethylene ester (FARBEN-FABRIKEN VORM. F. BAYER & Co.), A., i, 554.
o-Toluic acid, 5-chloro-3-amino- (KALLE & Co.), A., i, 209.
p-Toluic acid, 2:6-diamino-, methyl ester and acetyl derivative (KAUFFMANN and WEISSEL), A., i, 865.
ω-chloro-, and its chloride (BADISCHE ANILIN- & SODA-FABRIK), A., i, 176.**

- (*Tolyl compounds, Me=1.*)
- p*-Toluic acid, ω -dichloro-, methyl ester (WEGSCHEIDER and SUIDA), A., i, 976.
- o*-Toluidine, condensation of formaldehyde with (NASTUKOFF and KRONEBERG), A., i, 962.
- o*-Toluidine, 6-bromo-, and its acetyl derivative (FRIEDLÄNDER, BRUCKNER, and DEUTSCH), A., i, 318.
- di*-, and *tri*-thio-, and their salts and derivatives (HODGSON), T., 1696; P., 222.
- m*-Toluidine, effect of heat on a mixture of benzaldehydecyanohydrin and (BAILEY and MCCOMBIE), T., 2272; P., 266.
- p*-Toluidine, compound of phenylazoimide and (WOLFF and KOLASIUS), A., i, 1028.
- and 3-bromo-, aldol bases from, and their derivatives (EDWARDS, GARROD, and JONES), T., 1380; P., 163.
- diacetyl derivatives, hydrochloride of (DEHN), A., i, 834.
- o*-, *m*-, and *p*-Toluidines, telluri-bromides and -chlorides (GUTHRIE, FLURY, and EWALD), A., i, 689.
- p*-Toluidine-2-methylsulphone and its acetyl derivative (ZINCKE and ROLLHAÜSER), A., i, 551.
- p*-Toluidine-2-methylsulphoxide and its acetyl derivative (ZINCKE and ROLLHAÜSER), A., i, 551.
- p*-Toluidine-2-sulphonic acid, acetyl derivative, and its derivatives (ZINCKE and ROLLHAÜSER), A., i, 549.
- p*-Toluidinoacetothioamide (JOHNSON and BURNHAM), A., i, 305.
- α -*p*-Toluidinodiphenylacetic acid and its ethyl and methyl esters (KLINGER), A., i, 558.
- α -*p*-Toluidinodiphenylaceto-*p*-toluidide (KLINGER), A., i, 557.
- 4-Toluidino-1-methylantraquinone (HELLER, GRÜNTAL, and RUHTENBERG), A., i, 359.
- 8-*p*-Toluidino-5-phenoxyquinizarin (FREY), A., i, 477.
- 4-*p*-Toluidinophenylpyridazoneanthrone (ULLMANN), A., i, 1028.
- 4-*p*-Toluidinopyridazonanthrone (ULLMANN and MINAJEFF), A., i, 388.
- 7-*p*-Toluidino-10-*p*-tolyl-1-methylsafran-ol (HELLER), A., i, 917.
- 7-*o*-Toluidino-10-*o*-tolylsafran-ol (HELLER), A., i, 917.
- p*-Toluenitrile, ω -chloro-, and its compound with pyridine (BADISCHE ANILIN- & SODA-FABRIK), A., i, 355.
- p*-Toluo-yl chloride, ω -dichloro- (WEGSCHEIDER and SUIDA), A., i, 976.
- (*Tolyl compounds, Me=1.*)
- m*-Toluo-yl-*o*-benzoic acid, *p*-bromo- (HELLER, GRÜNTAL, and RUHTENBERG), A., i, 358.
- Toluquinone, 4-chloro-3-hydroxy- (HENRICH, TAUBERT, and BIRKNER), A., i, 184.
- o*-Tolyl ether, bromo-, dibromo-, chloro-, and dichloro- (MAILHE and MURAT), A., i, 254, 348.
- mercaptan, 4-amino-, and its derivatives (ZINCKE and ROLLHAÜSER), A., i, 550.
- 4-iodo- (ZINCKE and ROLLHAÜSER), A., i, 551.
- m*-Tolyl glycid ether (MARLE), T., 307.
- methyl ether, *p*-bromo- (PSCHORR and KOCH), A., i, 767.
- p*-Tolyl ether, bromo-, dibromo-, chloro-, and dichloro- (MAILHE and MURAT), A., i, 254.
- 1-*p*-Tolyl-1:2:4-triaminonaphthalene (MORGAN and MICKLETHWAIT), P., 325.
- o*-, *m*-, and *p*-Tolylaminosuccinotolyl-imides and nitroso- (WARREN and GROSE), A., i, 961.
- p*-Tolyl-2-anthraquinonylcarbamide (FARBWERKE VORM. MEISTER, LUCIUS, and BRÜNING), A., i, 119.
- o*-Tolyl-4-arsinic acid, 1-chloro-, and 1-chloro-6-nitro- (FARBWERKE VORM. MEISTER, LUCIUS, and BRÜNING), A., i, 595.
- m*-Tolylarsinic acid, 5-nitro-6-hydroxy- (BENDA and BERTHEIM), A., i, 63.
- 1-*o*- and -*p*-Tolyl-4-benzylidenethydan-tols and 2-thio- (JOHNSON, PFAU, and HODGE), A., i, 807.
- β -*p*-Tolylbutaldehyde and its derivatives (BLAISE and PICARD), A., i, 233.
- p*-Tolyl- ψ -cumyliodonium hydroxide, salts of (WILLGERODT and MEYER), A., i, 22.
- p*-Tolyl dimethylsulphine hydroxide and its salts (KEHRMANN and SAVA), A., i, 968.
- 3-*p*-Tolyl-2:5-dimethyltetrahydrofuran, 3-hydroxy- (DUPONT), A., i, 291.
- p*-Tolyl- $\beta\beta$ -dithiolvinyl ketone, desaurin from (KELBER and SCHWARZ), A., i, 207.
- Tolylene-3:4-sulphonylide (ANSCHÜTZ), A., i, 852.
- p*-Tolylethoxymethylethylcarbinol (BLAISE and PICARD), A., i, 232.
- β -*o*-Tolylethylamine and its salts (EMDE), A., i, 802.
- p*-Tolyl ethyl ketone, desaurin from (KELBER and SCHWARZ), A., i, 207.
- p*-Tolyl heptadecyl ketone (RYAN and NOLAN), A., i, 750.

(Tolyl compounds, $Me=1$.)

- p*-Tolylhomocampholic acid**, hydroxy-, sodium salt (HALLER), A., i, 359.
- 1-*o*- and -*p*-Tolylhydantoins** (JOHNSON, PFAU, and HODGE), A., i, 807.
- β*-*p*-Tolylhydroxylamine**, *β*-cyano-, and its iminochloride hydrochloride (WIELAND, ROSEEU, and GAMBARJAM), A., i, 907.
- o*-, *m*-, and *p*-Tolylideneanilines** (LAW), T., 158.
- m*-Tolylidene-*β*-naphthylamines**, 2- and 6-hydroxy- (SENIER, SHEPHEARD, and CLARKE), T., 1956.
- m*-Tolylidene-*m*- and *p*-toluidines** (LAW), T., 163.
- p*-Tolylidene-*o*-, -*m*-, and -*p*-toluidines** (LAW), T., 162.
- p*-Tolylidenetriaazoacetohydrazide** (CURTIUS and BOCKMÜHL), A., i, 426.
- p*-Tolylmercuric bromide** (POPE and GIBSON), T., 736.
- 1-*p*-Tolyl-*α*-naphthylamine**, 2:4-dinitro- (MORGAN and MICKLETHWAIT), P., 325.
- 3-*p*-Tolyl-2-methyl-4-dihydroquinazolinone**, and dinitro- (BOGERT and GEIGER), A., i, 396.
- methiodide (BOGERT and GEIGER), A., i, 511.
- 5-*p*-Tolyl-2-methyldiphenylmethane-2'-carboxylic acid** (SEER and KARL), A., i, 572.
- o*-Tolyl-2-methyl-4-ethylphenyliodonium hydroxide** and its salts (WILLGERODT and JAHN), A., i, 22.
- p*-Tolylmethylketazine** (CURTIUS and KOF), A., i, 733.
- 4-Tolyl-2-methylsulphoxide**, 5-bromo-4-iodo- (ZINCKE and ROLLHAÜSER), A., i, 551.
- β*-*o*-Tolyl-naphthylamine**, *p*-chloro- (KNOLL & Co.), A., i, 345.
- β*-*m*-Tolyl-naphthylamine** (KNOLL & Co.), A., i, 345.
- α*-*o*-, -*m*-, and -*p*-Tolyl-naphthylamines** (KNOLL & Co.), A., i, 345.
- p*-Tolylxyacetone**, *o*-nitro- (KÖNIG and BECKER), A., i, 497.
- α*-*m*-Tolylxypropane**, *γ*-chloro-*β*-hydroxy-, and its phenylurethane (MARLE), T., 312.
- p*-Tolylpentadecylcarbinol** and its derivatives (RYAN and NOLAN), A., i, 750.
- p*-Tolyl pentadecyl ketone**, derivatives of (RYAN and NOLAN), A., i, 749.
- Tolyl phenylamyl ketone** (v. BRAUN and DEUTSCH), A., i, 688.
- p*-Tolylphenylmethanedicarboxylic acid** and its dimethyl ester (LIEBERMANN and RAHTS), A., i, 466.

(Tolyl compounds, $Me=1$.)

- 10-*o*-Tolylsafranil-7-hydroxy-** (HELLER), A., i, 917.
- 3-*p*-Tolyl-2-styryl-4-dihydroquinazolinone** (BOGERT and BEAL), A., i, 394.
- methiodide (BOGERT and GEIGER), A., i, 511.
- o*-Tolylthiolacetic acid**, *m*-amino- (KALLE & Co.), A., i, 452.
- m*-Tolylthiolacetic acid**, 4:6-dichloro- (KALLE & Co.), A., i, 770.
- o*- and *m*-Tolylthiolacetic acids**, 4-chloro- (KALLE & Co.), A., i, 557.
- 4-*p*-Tolylthiolanthraquinone**, 1-amino-, and 1-thiocyano- (GATTERMANN), A., i, 1002.
- 1-*o*- and -*p*-Tolylthiolanthraquinones** (GATTERMANN), A., i, 1002.
- 1-*p*-Tolylthiolanthraquinone-2-carboxylic acid** (BADISCHE ANILIN- & SODA-FABRIK), A., i, 468.
- p*-Tolylthiolanthraquinone-5-, -6-, and -8-sulphonic acids**, potassium salts (GATTERMANN), A., i, 1002.
- 4-Tolylthiolanthraquinone-1-thiazole** (GATTERMANN), A., i, 1005.
- 4-*p*-Tolylthiol-1-methylthiolanthraquinone** (GATTERMANN), A., i, 1003.
- m*-Tolyl-*m*- and -*p*-toluidines** and their hydrochlorides (LAW), T., 163.
- p*-Tolyl-*o*-, -*m*-, and -*p*-toluidines** and their hydrochlorides (LAW), T., 162.
- "**Tore**," formation of, in pine-wood (NORDENSKJÖLD), A., ii, 979.
- Torpedo ocellata***, estimation of fat in the organs of (REACH and WIDAKOWICH), A., ii, 580.
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